Managed Data Networks Section

Contents

Click on the section that you are interested in.

1	About the Managed Data Networks section Our Customer Terms Inconsistencies	4 4 4
2	Availability	4
3	Managed Data Networks What is MDN? Incompatible equipment No assignment or resupply Carriage service management When we perform work We have to approve requests	4 4 5 5 6 6
4	Additional Services SDWAN service Data Centre Switch and Application Delivery Controller Wireless WAN Managed Wi-Fi Dedicated Managed Wi-Fi Cloud Managed Wi-Fi Analytics WAN Optimisation WAN Optimisation – Hosted WAN Optimisation WAN Optimisation – Virtual Platform WAN Optimisation – Mobile WAN Optimisation – Load Balancing WAN Optimisation – SaaS Cloud Acceleration WAN Optimisation Cloud Server Platform Storage Centralisation Managed Data Centre Switching 5G Module service	6 7 8 9 12 15 16 17 17 18 19 19 20 21 23
5	Service term and termination Minimum term Termination Consequences of terminating a rental arrangement	23 23 24 25
6	Equipment How you can get equipment Licence to use related software Your equipment obligations	25 25 26 26
7	Rental and purchase of equipment Obtaining rental equipment Use of rental equipment Replacement, alterations and addition of parts Lost, stolen or damaged equipment Maintenance Insurance	26 26 26 27 27 27 27

Managed Data Networks Section

	Purchase of equipment	27
8	Security of the equipment and network Level of security provided When we don't provide security	28 28 28
9	Your network details What you must do Network design Intellectual Property and confidentiality	28 28 28 29
10	Network implementation services Site audit Managed Wi-Fi Dedicated and Managed Wi-Fi Cloud site survey Equipment installation and configuration Equipment and service commissioning Asset management	29 29 29 30 30 31
11	Service tiers Proactive Secure service tier Network Care Plus service tier Equipment type according to size	31 36 36 37
12	Network management, equipment services, other services Network management Service desk Service assurance Priority levels Fault monitoring and notification Fault restoration hours Major network alterations Configuration file management Equipment maintenance support Emergency device replacement service Online alarm view Monthly activity report Consultancy and audit services Network management system maintenance outages	37 38 38 38 40 40 41 41 41 42 42 43 43
13	Performance reporting Online reporting Written analysis reporting Response path reporting Application visibility and usage online reporting Enhanced network performance reporting MDCS performance reporting	43 44 45 46 47 47 48
14	Adds, moves and changes Minor Network Alterations – Simple changes Minor Network Alterations – Complex changes Minor Network Alterations – Simple or complex change requests Major network alterations	48 48 49 49 50
15	Charges for your MDN service Equipment charges Managed Wi-Fi Dedicated, Managed Wi-Fi Cloud and Managed Vanalytics charges	51 51 Wi-Fi 51

Page 3 of 54

Our Customer Terms Managed Data Networks Section

16	Special meanings	53
	Travel and accommodation charges	53
	Site survey charges	53
	MDN Bundle charges	52
	Consultancy and audit service charges	52
	Major network alterations	52
	Minor network alterations – equipment configuration file chang	ges 52
	Adds, moves or changes charges	52
	Equipment maintenance support charges	52
	Service tier charges	52

Managed Data Networks Section

Certain words are used with the specific meanings set out on page 53 or in the <u>General Terms of</u> Our Customer Terms ("General Terms").

1 About the Managed Data Networks section

Our Customer Terms

- 1.1 This is the Managed Data Networks ("MDN") section of Our Customer Terms.
- 1.2 The General Terms apply unless you have a separate agreement with us, which excludes the General Terms.

Inconsistencies

- 1.3 This section applies to the extent of any inconsistency with General Terms.
- 1.4 If this section lets us suspend or terminate your service, that's in addition to our rights to suspend or terminate your service under the General Terms.

2 Availability

2.1 From 15 November 2020, all MDN Reactive Bundles and MDN Proactive Bundles will no longer be available to purchase by new customers. These bundles include Cisco routers and switches and Juniper routers and switches.

3 Managed Data Networks

What is MDN?

- 3.1 The MDN service manages your data network and associated accredited equipment.
- 3.2 The MDN service includes some or all of the following (depending on what you choose):
 - (a) network design services;
 - (b) purchase or rental of accredited equipment;
 - (c) network implementation services;
 - (d) network management services;
 - (e) equipment maintenance services;
 - (f) performance reporting services; and
 - (g) other additional services in relation to your data network.

Managed Data Networks Section

- 3.3 You can apply for a MDN service as a:
 - (a) MDN Custom service, which manages your accredited equipment and allows you to choose from a broad range of optional services under an expanded range of service tiers ("MDN Custom" service). For your MDN Custom service, we charge you according to each service component you choose; and/or
 - (b) MDN Bundle service, which includes equipment rental, design, installation, maintenance, management and reporting under a limited set of service tiers ("MDN Bundle" service). For your MDN Bundle service, we charge you a monthly service charge and any optional service charges.
- 3.4 Your MDN service consists of your MDN Custom services and/or MDN Bundle services plus any additional services you choose.
- 3.5 To apply for a MDN service at a site, you must:
 - (a) have an appropriate data carriage service with us at that site; and
 - (b) meet our minimum technical requirements.
- 3.6 For your MDN Custom service, you can choose a different service tier, equipment maintenance level and performance reporting for each device.
- 3.7 If additional hardware (eg. an interface card) is installed or located in your equipment:
 - (a) we must manage the equipment that the hardware is installed or located in; and
 - (b) the hardware and the equipment must have the same service tier.
- 3.8 We cannot provide a MDN service if a third party manages the relevant equipment.

Incompatible equipment

3.9 We only provide a MDN service for accredited equipment we approve in advance.

No assignment or resupply

3.10 The MDN service is not available to Telstra Wholesale customers or for resale. You cannot assign or resupply the MDN service to a third party.

Carriage service management

3.11 As part of your MDN service, we manage the restoration of your related carriage services according to your chosen service assurance level for each carriage service. Details can be found in the Standard Restoration and SLA Premium section of Our Customer Terms or in the terms for your carriage service.

Managed Data Networks Section

When we perform work

3.12 Unless otherwise stated, we perform work as part of your MDN service (including installation, configuration, site surveys or site audits and equipment services) during business hours. Additional charges apply for work outside business hours, which we can confirm on request.

We have to approve requests

3.13 In this MDN section of Our Customer Terms, where it states that you can apply, request, ask, are eligible (or any other similar wording) for a service, feature, functionality, or any other item ("**Request**"), we can accept or reject that Request at our choice.

4 Additional Services

- 4.1 You can apply for the following additional services as part of your MDN service:
 - (a) Software-defined WAN ("SDWAN") service, which uses a software overlay to abstract the underlying network and a centralised, application-based policy controller to provide intelligent path selection across WAN links. It simplifies the delivery of WAN services to branch sites through transport agnostic connectivity, ease of deployment, central manageability and the intelligence to automatically adjust traffic flows between multiple links;
 - (b) Data Centre Switches ("**DCS**") service, which provides high performance switches in your data centre that include the core, aggregation and access layer;
 - (c) Application Delivery Controller ("ADC") service, which aims to improve server performance and availability. This is typically achieved by load balancing transactions to an appropriate server and offloading computationally intensive communications processing from the server;
 - (d) Wireless WAN ("WWAN") service, which is comprised of accredited equipment (usually Telstra mobile network compatible wireless equipment), integrated with a MDN Custom service or MDN Bundle service and a mobile data plan. The WWAN service allows you to use the Telstra mobile network as your primary access into your network or as a service backup if your primary access fails;
 - (e) Managed Wi-Fi ("Managed Wi-Fi Dedicated") service, which is an extension to, or an alternative for, a wired LAN within a site, based on the IEEE 802.11 suite of standards:
 - (f) Managed Wi-Fi Cloud ("Managed Wi-Fi Cloud") service, which is a cost effective, "plug and play" cloud managed Wi-Fi service, with standardised features and equipment;
 - (g) Managed Wi-Fi Analytics ("Managed Wi-Fi Analytics") service, which aims to deploy Wi-Fi access points and give you analytics information. You can use

Managed Data Networks Section

- Managed Wi-Fi Analytics to let your customers or end users access the Internet on your premises and to understand their behaviours;
- (h) WAN Optimisation ("WAN Optimisation") service, which is designed to optimise your network to deliver improved performance of applications through the use of the WAN Optimisation accredited equipment;
- (i) WAN Optimisation Cloud ("WAN Optimisation Cloud") service, which offers similar functionality to WAN Optimisation, virtualised in a Telstra data centre;
- (j) Server Platform ("**Server Platform**") service, which is an ad-on to your managed router service that lets you utilise on-board server capability on your router;
- (k) Storage Centralisation ("**Storage Centralisation**") service, which centralises and consolidates your data storage at a data centre rather than at multiple branch sites; and
- (l) Managed Data Centre Switching ("MDCS") service, which aims to improve your data centre network's performance by using programmable data centre switches.
- (m) Cisco 5G modules ("**5G Module**") service, which comprises a 5G module device which can be connected to compatible routers to provide 5G mobile connectivity for SDWAN and traditional routing. We can confirm whether 5G Module services are available with your MDN service at the time you apply.
- 4.2 We can confirm whether the above additional services are available with your MDN service at the time you apply.

SDWAN service

- 4.3 For SD-WAN services, we only offer the Reactive and Proactive Service Tiers as set out in the table at clause 11.2 with the following changes:
 - (a) The only performance reporting feature provided is the online reporting functionality included with the SD-WAN solution provided by the vendor.
 - (b) We configure encryption taking into account your requests, what the technology allows and our legal obligations as a carrier. We may not have access to the decryption keys if they are managed by the vendor.
 - (c) We use the vendor's relevant API protocol to access customer premises equipment to manage security features.
- 4.4 In order for us to provide the SD-WAN services to you, you must keep purchasing the following from us at additional charges that we notify to you at the time of your order or renewal:
 - (a) vendor maintenance for any equipment that forms part of the SD-Wan solution; and

Managed Data Networks Section

(b) vendor software subscription for any software that forms part of the SD-WAN solution or that we need to manage your SD-WAN service.

Data Centre Switch and Application Delivery Controller

- 4.5 To apply for a DCS service at a site, you must have a managed router with us at that site.
- 4.6 To apply for the ADC service at a site, we must manage your networking devices between the data network and the ADC.
- 4.7 The DCS service supports compatible layer 2 and 3 accredited features, such as standard IP routing protocols, network load balancing, traffic redirection and virtual LANs.
- 4.8 The ADC service supports compatible ADC accredited features, including virtual contexts, virtual servers and configuration, and allocation of application requests to an appropriate server.
- 4.9 When you apply for the DCS or ADC service, you can ask us for further information on the accredited features we support.

Wireless WAN

Not available for new service connections or service changes from 01 January 2023 and discontinued from 30 March 2023.

- 4.10 The WWAN service is not available with the Basic Managed service tier.
- 4.11 To acquire the WWAN service, you must:
 - (a) provide, or rent or purchase from us, a Telstra mobile network compatible wireless router that we have accredited;
 - (b) have antenna and cabling that you buy from us or that we have accredited. We can provide you with advice and pricing on suitable antenna and cabling options;
 - (c) acquire a suitable Mobile Data Plan from us the terms for your plan (including charges) are in the Mobile Services section (Part G) of Our Customer Terms; and
 - (d) acquire an IP WAN Wireless port from us for every network being connected –
 the terms for your IP WAN Wireless Port (including pricing) are in Part B IP
 Networking Services of the <u>IP Solutions section</u> of Our Customer Terms.
- 4.12 The WWAN service is only available in selected areas. You may have to obtain from us, at additional charge, a site survey to confirm you are in a selected area and if you need any additional equipment.
- 4.13 We don't guarantee your WWAN service's availability in required locations or any service level or target associated with the Telstra mobile network as part of your MDN service.

- 4.14 If you choose a WWAN service as a service back up, you must choose a plan set out in the Mobile Services section (Part G) of Our Customer Terms or a plan set out in your separate agreement with us. The terms that apply to your plan are the terms set out in the Mobile Services section (Part G) of Our Customer Terms unless otherwise set out in your separate agreement with us.
- 4.15 You must have a service assurance level that is compatible with, or has a better restoration time than, your chosen plan. This may restrict the type of primary access service available for certain plans because some service assurance levels are only available with certain products or services. Details can be found in your separate agreement with us or we can advise you on request.
- 4.16 If you choose the WWAN service as a service back up, you must:
 - (a) comply with the Fair Play Policy set out in Part A of the Mobile Services section of Our Customer Terms;
 - (b) not alter the configuration of your WWAN service without our prior consent;
 - (c) not use the WWAN service as a primary access; and
 - (d) only use the WWAN service as a service back up for time that your primary access into your network has failed.

We may suspend or cancel some or all of your WWAN service if you breach this clause.

- 4.17 You acknowledge that:
 - (a) the Telstra mobile network is a shared network, so throughput and latency depends on user numbers and traffic. We don't guarantee throughput of data;
 - (b) not all applications can run on your WWAN service; and
 - (c) networks using the WWAN service generally operate at a latency between 80ms 100ms. This means that a WWAN service is more suited to applications where data usage is low and where the application is not sensitive to latency.

Managed Wi-Fi Dedicated

- 4.18 The Managed Wi-Fi Dedicated service is not available with the Basic Managed service tier.
- 4.19 The Managed Wi-Fi Dedicated service is provided on shared, unlicensed spectrum. There may be interference with (and we don't guarantee), the availability, performance or quality of your Managed Wi-Fi Dedicated service. If you report issues with your Managed Wi-Fi Dedicated service, we aim to correct issues we identify with the configuration of your wireless equipment. However, we don't guarantee this will improve the availability, performance or quality of your Managed Wi-Fi Dedicated service.

- 4.20 We supply the Managed Wi-Fi Dedicated service only to the point at which the IP packets are converted into radio frequency. The Managed Wi-Fi Dedicated service does not include any device issues that relate to laptop or desktop connectivity (or any other similar issues).
- 4.21 We configure the 802.11 wireless equipment for your Managed Wi-Fi Dedicated service. We don't configure your client devices or authentication servers as part of the Managed Wi-Fi Dedicated service.
- 4.22 We take reasonable care to control electronic access to the Managed Wi-Fi Dedicated service by third parties. However, radio signals transmitted and received by the 802.11 wireless equipment aren't secure. You are responsible for all security issues with the Managed Wi-Fi Dedicated service. Subject to the Australian Consumer Law provisions in the General Terms of Our Customer Terms, we aren't responsible for any unauthorised access to data or other communications sent or received by the 802.11 wireless equipment.
- 4.23 You can apply for an optional security enhancement to your Managed Wi-Fi Dedicated service. This security enhanced Managed Wi-Fi Dedicated service offers the following features:
 - (a) **Wireless Intrusion Prevention** aims to provide you with alarms of unauthorised access and security incidents in your Managed Wi-Fi Dedicated service that our systems detect. It's your responsibility to deal with these alarms and incidents, but you may ask us to assist you for an additional fee;
 - (b) **Secure Radius Authentication** is a managed authentication service based on a Radius application. You can provide the Radius application or obtain it from us. If you provide the Radius application, we first have to verify that it is compatible with our service and additional fees may apply. If we provide the Radius application, you must comply with the applicable Radius licence terms;
 - (c) CleanAir Spectrum Monitoring aims to detect and temporarily adjust for radio frequency interference, such as from rogue access points, microwave ovens, Bluetooth devices, or cordless phones; and
 - (d) **Device Locator** aims to track the signal strength and location of Wi-Fi devices and known interferences in your office environment that may affect your Managed Wi-Fi Dedicated service.
- 4.24 You can apply for one or more of the above features or the below components as part of your security enhanced Managed Wi-Fi Dedicated service. However, to do this, you may need to obtain additional features, components, or accredited equipment from us, which we can confirm at the time you apply. These components may include:
 - (a) **Mobility Services Engine ("MSE")** a logging and tracking service for accredited devices in your Managed Wi-Fi Dedicated service;

Managed Data Networks Section

- (b) **Prime Infrastructure ("PI")** provides visibility, control and reporting of wireless access points, wireless LAN controllers and the MSE. We install and manage the PI at your site. We give you read only access to the PI; and
- (c) **Secure Access Control Service** an access control system and an integration point for wireless network access control and identity management; and
- (d) **Identity Services Engine ("ISE")** an integrated system which provides: access control; authentication authorisation and accounting; user policy and profile management; and device posture management and remediation.
- 4.25 By using the security enhanced Managed Wi-Fi Dedicated service, you acknowledge that you choose to apply encryption and have control of all encryption keys for the service.
- 4.26 If you have the ISE as part of your Managed Wi-Fi Dedicated service, you will see the alarms that the ISE generates. We don't monitor these alarms. We only action these alarms after you tell us to and will do so by following your instructions. We aren't liable for any consequences of following your instructions.
- 4.27 If you allow "bring your own devices" ("**BYOD**") to access your Managed Wi-Fi Dedicated service, you're responsible for:
 - each of those BYOD and their users, including enrolment of users and configuring their BYOD and supporting and responding to queries from any user of a BYOD;
 - (b) any use of your Managed Wi-Fi Dedicated service by a BYOD user;
 - (c) ensuring compatibility with each BYOD and your Managed Wi-Fi Dedicated service;
 - (d) BYOD policies, which could cover when and who can access your Managed Wi-Fi Dedicated service, what they can access and permitted levels of data usage;
 - (e) BYOD "postures", which could cover the elements on the device and what applications are allowed on the device; and
 - (f) any third party applications used on the BYOD or in connection with your Managed Wi-Fi Dedicated service.
- 4.28 You must ensure that any user of a BYOD complies with your obligations under this section and the General Terms.
- 4.29 You indemnify us from all claims, losses, damages, costs and expenses (including legal expenses) (**Loss**) we incur, suffer or are liable for arising naturally (that is, according to the usual course of things) out of or in connection with any claim against us in relation to the use of BYOD with your Managed Wi-Fi Dedicated service, including any claims brought by BYOD users, except to the extent we cause or contribute to the event(s) that

Managed Data Networks Section

causes the claim. We will take reasonable steps to mitigate our Loss we incur, suffer or are liable for, in connection with the relevant claim.

Managed Wi-Fi Cloud

- 4.30 Managed Wi-Fi cloud aims to deliver fast deployment of Wi-Fi access points and gives you analytics information. You can use the service to let your customers or end users access the Internet on your premises and to understand their behaviours.
- 4.31 It includes some or all of the following (depending on what you request):
 - (a) **access points** each access point supports a certain number of users;
 - (b) **switches** provides device connectivity and gives application visibility;
 - (c) **security appliances** blocks content at a specific level;
 - (d) **accessories** additional hardware that compliments your switches and security appliances, including uplinks and interface modules; and
 - (e) **a cloud based dashboard** delivers reporting and analytics information. It provides a centralised view of your Managed Wi-Fi Cloud devices and analytics information on your customers and end users. This information could include their length of stay, applications used and sites visited.
- 4.32 In relation to Managed Wi-Fi Cloud, you must ensure that at all times:
 - (a) you have a compatible Telstra Internet service for use with Managed Wi-Fi Cloud;
 - (b) your sites meet our requirements, including our requirements from time to time on power, cabling and rack space; and
 - (c) we manage your switches at the site for connection of your access points;
- 4.33 You may need to obtain a site survey before we can provide you with Managed Wi-Fi Cloud see clause 10.4(b);
- 4.34 We may deliver feature updates or enhancements via the cloud to your Managed Wi-Fi Cloud devices. When this happens, there may be a short outage to your Managed Wi-Fi Cloud service.
- 4.35 In relation to your obligations under clause 6.6 to comply with the licence terms for your Managed Wi-Fi Cloud service, the most recent terms are set out on https://meraki.cisco.com/ (as updated from time to time).
- 4.36 If you allow BYOD on your Managed Wi-Fi Cloud service, then you must comply with clauses 4.27 to 4.29 as though references to "Managed Wi-Fi Dedicated" are references to "Managed Wi-Fi Cloud".

Managed Data Networks Section

- 4.37 If you purchase the WWAN service in connection with your Managed Wi-Fi Cloud service then the terms relating to the WWAN service, in clauses 0 to 4.17, will apply except you will not be required to purchase an IP WAN Wireless port, pursuant to clause 4.11(d), where you elect failover over internet for the service.
- 4.38 You can request rapid activation as an optional add-on for your Managed Wi-Fi Cloud service.
- 4.39 Rapid activation is available on compatible devices and provides you with a:
 - (a) primary mobile connection for quick branch connectivity; or
 - (b) temporary mobile connection until your fixed carriage primary connection is ready to be switched on when that happens, your mobile connection will work as a backup connection, and,

you must order a compatible mobile service from us as part of rapid activation ("**Rapid Activation**").

- 4.40 Where clause 4.39(b) applies, once your fixed carriage primary connection is ready, we will connect that service to the Rapid Activation device for you.
- 4.41 You can ask for "read only" access to the Managed Wi-Fi Cloud portal via the FNC function under clause 14.4. This gives you read access (but no change rights) to most aspects of your Managed Wi-Fi Cloud network. These aspects include network device configurations and other information ("**Security Information**").
- 4.42 If we agree to give you "read only" access under clause 4.41, you:
 - (a) acknowledge that the Security Information could potentially be used to compromise the operation or security of the Managed Wi-Fi Cloud service and your network or equipment;
 - (b) must ensure third parties do not see, access, or use the Security Information or your read access;
 - (c) are solely responsible for, and accept any liability in connection with, any use or disclosure, and the protection of all Security Information accessed using your read only access, regardless of whether or not you authorised the use; and
 - (d) must promptly follow our instructions and promptly comply with our requests from time to time in relation to your read only access.
- 4.43 On request, we may give you and your authorised users limited write access to the Managed Wi-Fi Cloud portal through the "Enterprise Admin" role. This will allow you to make simple changes to the Managed Wi-Fi Cloud network.
- 4.44 If we agree to give you the limited write access under clause 4.43, you:

Managed Data Networks Section

- (a) must ensure third parties do not access or use your limited write access;
- (b) must only perform the approved customer change activities outlined in clause 4.46;
- (c) must give us a list of your authorised users for the Enterprise Admin role as soon as practicable (including when that list changes, promptly after the change);
- (d) must give us the individual and specific email addresses of your authorised users (and not group emails example: we will not accept itsupport@customer.com). The Enterprise Admin role will only be given to authorised users from your organisation and not to any of your third-party providers;
- (e) must ensure that all authorised users have read and agreed to clauses 4.41 to 4.49, and all other related terms in this section when using limited write access.
- (f) are responsible for each authorised user who has visibility of network device configurations and other Security Information, including information used to help protect the security and integrity of your network (such as passwords);
- (g) must ensure the Security Information made available to you and your authorised users is used only for managing equipment forming part of your Managed Wi-Fi Cloud service. You must not use, or allow unauthorised users to use, that information for a purpose other than that described in clause 4.46;
- (e) are solely responsible for, and accept any liability arising from, any use or disclosure and the protection of all Security Information accessed using your Enterprise Admin access, regardless of whether or not you authorised the use
- (h) must not disclose any passwords of the Enterprise Admin account beyond any authorised users; and
- (i) must promptly follow our instructions and promptly comply with our requests from time to time in relation to your limited write access.
- 4.45 You must ensure that authorised users with limited write access only perform the activities in clause 4.46, even if the Enterprise Admin role allows other activities. We are not liable or responsible for these other activities or any resulting consequences.
- 4.46 The approved customer change activities are:
 - (a) Wi-Fi SSID name change;
 - (b) Wi-Fi SSID password change;
 - (c) Switch port change;
 - (d) VLAN/Subnet change;

- (e) add new static routes;
- (f) delete customer added static routes;
- (g) create, change and apply group policy;
- (h) traffic shaping;
- (i) layer 3 and layer 7 firewall rules;
- (j) content filtering;
- (k) URL blacklist/whitelist;
- (1) client whitelist/blacklist; and
- (m) create/update splash page
- 4.47 If you, your authorised users, or any person using your Enterprise Admin access makes any changes that cause or contribute to any faults or incidents, this is deemed to be covered by clause 12.15.
- 4.48 You must not change the device name and/or device location or uplink configuration whilst having Enterprise Admin access. Instead you can contact us for these changes.
- 4.49 You must promptly set up and maintain two-factor authentication as per your profile settings found on the Managed Wi-Fi Cloud dashboard.

Managed Wi-Fi Analytics

- 4.50 Managed Wi-Fi Analytics is only available with the Reactive service tier.
- 4.51 You can request the following features as part of your Managed Wi-Fi Analytics service:
 - (a) **captive portal** landing page and registration function that acts as a gatekeeper for connections to a Wi-Fi service that we've approved in advance;
 - (b) **analytics portal** a web based dashboard that gives certain real time and historical reports on user behaviour within a Wi-Fi coverage area; and
 - (c) **application** integration delivers contextual information to a user's compatible smart device, based on the user's location and proximity to key site features.
- 4.52 In relation to your Managed Wi-Fi Analytics service, you must at all times ensure:
 - (a) you have a compatible Wi-Fi service that we've approved in advance; and
 - (b) you and your sites meet our requirements from time to time, including in relation to power, cabling and rack space.

Managed Data Networks Section

4.53 Before we can provide you with Managed Wi-Fi Analytics, you must obtain from us, a site survey under clause 10.4(b), unless we otherwise agree.

WAN Optimisation

- 4.54 There are four available WAN Optimisation services:
 - (a) appliance based, where we install a standalone device in your network;
 - (b) hardware based, which is incorporated within the router:
 - (c) software based, which is incorporated within the router;
 - (d) virtual appliance based, which is installed and operated on your server; and
 - (e) virtual appliance based, which is installed and operated on our server in our data centre, as part of WAN Optimisation Cloud.
- 4.55 If your WAN Optimisation service is virtual appliance based, at all times:
 - (a) you must ensure that the server and its specifications are compatible with and able to support the WAN Optimisation service;
 - (b) you must give us remote connectivity to the server for commissioning and management and to perform our obligations under this section;
 - you must at your own cost, buy from us and install yourself, the necessary software on the server:
 - (d) you're responsible for all aspects of the server, including configuring and backing up the server; and
 - (e) if a server fault affects the WAN Optimisation service, our obligations under this section (including our service assurance obligations) don't apply until you restore the server to full and proper working condition.
- 4.56 You can apply for the following features as part of your WAN Optimisation service:
 - (a) Hosted WAN Optimisation;
 - (b) Virtual Platform;
 - (c) Mobile WAN Optimisation;
 - (d) Load Balancing; and
 - (e) Software as a Service ("SaaS") Cloud Acceleration

These features are described further below.

Managed Data Networks Section

- 4.57 If you choose the appliance based service, you can manage your own router or have us manage it as part of your MDN Custom service or MDN Bundle service. If you choose the hardware, software or virtual appliance based service, we must manage your router as part of your MDN Custom service or MDN Bundle service.
- 4.58 To apply for the WAN Optimisation service at a site, you must have a managed router which is enabled with Quality of Service (QoS).
- 4.59 If you applied for your WAN Optimisation service before 30 June 2012, pricing for your WAN Optimisation service includes pricing for the relevant software licences. If you applied for your WAN Optimisation service on or after 30 June 2012, additional charges may apply for the relevant software licences.
- 4.60 If you need to increase the bandwidth of your data network, then we may need to upgrade the relevant software licences at additional cost to you. If:
 - (a) you manage your router, you must tell us at least 30 days before any increase in your data network's bandwidth. We will tell you if additional software charges apply; or
 - (b) we manage your router, we will tell you of any additional software charges when you apply to increase the bandwidth of your MDN service.
- 4.61 Further to the applications that are auto-detected during configuration of the WAN Optimisation equipment, you can also request us to commission up to 5 additional applications. If you need more than 5 additional applications, we charge you an additional fee, which we tell you at the time.

WAN Optimisation – Hosted WAN Optimisation

4.62 If we accept your application for a Hosted WAN Optimisation service, we provide you with a WAN Optimisation service delivered from one of our authorised data centres.

WAN Optimisation – Virtual Platform

- 4.63 The virtual platform service aims to utilise the virtual server capabilities available on your WAN optimising device to allow you to partition that device into virtual instances ("Virtual Platform").
- 4.64 We'll give you administrator access to the Virtual Platform after it's commissioned.
- 4.65 You're responsible for the following aspects of your Virtual Platform service at all times:
 - (a) providing and installing the "hypervisor", if you signed up for your Virtual Platform service on and from 24 June 2013. The hypervisor is software that allows a hardware server to run multiple virtual machines;

Managed Data Networks Section

- (b) creating the number of virtual instances that can be supported by the device over which Virtual Platform is applied. Please note there are limits on the number of virtual instances available, depending on the device;
- (c) loading any operating system, files, applications and software that you choose on that device; and
- (d) applying any operating system patches and backing up of all data on the Virtual Platform.
- 4.66 If your Virtual Platform service stops working, we'll re-build and re-commission it back to the state it was in when we first commissioned the service. You're responsible for reloading any data on the Virtual Platform and for completing the tasks in clause 4.65.

WAN Optimisation - Mobile

- 4.67 Mobile WAN optimisation aims to optimise data traffic between your end user devices (such as laptops) back to your data centre or head end devices ("Mobile WAN Optimisation").
- 4.68 We'll install, commission, manage and maintain your Mobile WAN Optimisation head end devices. You're responsible for all aspects of your end user devices.
- 4.69 We'll give you access to end user client software that you must download, install and set to enable an optimised connection between the end user device and the head end device. Depending on your requirements, you may need to upgrade the software or number of licences required to use Mobile WAN Optimisation, at additional cost.
- 4.70 We'll deliver Mobile WAN Optimisation using the default settings recommended by our suppliers. If you want customised settings, you must first obtain our written confirmation that those customised settings can be supported. Note that customised settings may incur additional fees and we can tell you what these are at the time.
- 4.71 If your Mobile WAN Optimisation service doesn't work in relation to your head end device, we'll try and find out why. If the fault is with the head end device, we'll aim to fix the fault. If the fault is with your end user device, you're responsible for fixing it and we may charge you for the time we've spent to investigate the fault, using our then standard time and material rates.

WAN Optimisation – Load Balancing

- 4.72 Load balancing aims to distribute and balance data traffic between multiple WAN optimising devices so that the most suitable device handles the data load ("Load Balancing").
- 4.73 We'll work with you on the appropriate methodology for Load Balancing to try and meet your business requirements.

Managed Data Networks Section

WAN Optimisation - SaaS Cloud Acceleration

- 4.74 SaaS Cloud Acceleration aims to improve the performance of compatible software as a service applications.
- 4.75 We'll enable SaaS Cloud Acceleration on your WAN Optimisation equipment if your equipment supports that functionality.
- 4.76 You must buy from us, the appropriate application licenses in sufficient numbers to enable SaaS Cloud Acceleration.
- 4.77 SaaS Cloud Acceleration aims to optimise the compatible applications between your WAN Optimisation device and your SaaS cloud provider. However, as we have no control over your SaaS cloud provider or the Internet, subject to the Australian Consumer Law provisions in the General Terms of Our Customer Terms, we can't and don't guarantee that your SaaS Cloud Acceleration service will be uninterrupted or error free.

WAN Optimisation Cloud

- 4.78 WAN Optimisation Cloud offers similar functionality to WAN Optimisation. It's deployed as a virtual instance on our server in our data centre.
- 4.79 WAN optimisation Cloud aims to optimise data traffic between your branch sites and end user devices (such as laptops) back to our hosted servers in our data centre.
- 4.80 To obtain a WAN Optimisation Cloud service, you must also obtain from us, the applicable "cloud infrastructure" service. The applicable terms for that service are set out in the cloud section of Our Customer Terms here: http://www.telstra.com.au/customer-terms/business-government/cloud-services.
- 4.81 This MDN section applies to the extent of any inconsistency with the cloud section of Our Customer Terms.
- 4.82 To ensure your WAN Optimisation Cloud service operates correctly, you must install and run such software on your virtual servers and infrastructure that we request from time to time.
- 4.83 WAN Optimisation Cloud is only available with the Proactive or Reactive service tiers.

Server Platform

- 4.84 The Server Platform service is an add-on to your managed router service that lets you utilise on-board server capability on that router.
- 4.85 To apply for a Server Platform service at a site, you:
 - (a) must have a managed router with us at that site; and

Managed Data Networks Section

- (b) may need to add the appropriate hardware to your router or buy a new router, unless your router already has the functionality to support the Server Platform service.
- 4.86 The Server Platform service provides you with a computer server within your managed router, which you will have administrator access to.
- 4.87 The Server Platform service works in a similar way to the "WAN Optimisation Virtual Platform" service. This means you and we must comply with clauses 4.65 and 4.66 as though references to "Virtual Platform" are references to "Server Platform".

Storage Centralisation

- 4.88 The Storage Centralisation service aims to:
 - (a) centralise and consolidate your data storage at a data centre rather than at multiple branch sites;
 - (b) enables you to have your most commonly used data available locally or delivered from the data centre; and
 - (c) provide a "snapshot" function on request, which is a moment in time capture of your branch data storage that is only available for compatible servers.
- 4.89 To apply for the Storage Centralisation service, you must obtain from us, at least:
 - (a) 1 compatible device at each branch site; and
 - (b) 2 compatible devices at the data centre, which can be dedicated or virtualised devices.
- 4.90 If your compatible devices at the data centre are virtualised devices (also known as "virtual appliances"), then you must at all times and at your cost:
 - (a) provide the compute for that device; and
 - (b) comply with clause 4.55 as though references to your WAN Optimisation service are references to your Storage Centralisation service; and
- 4.91 The Storage Centralisation service is only available with the Proactive or Reactive service tiers.
- 4.92 Before we can supply you with the Storage Centralisation service, we must, at your cost, complete an assessment of your branch sites and data storage environment.
- 4.93 This assessment helps us understand your requirements, the way you conduct your data storage, and obtains other information we need to supply you with the Storage Centralisation service.

Managed Data Networks Section

- 4.94 You must at your own cost, give us any assistance we reasonably need to conduct this assessment, including complying with the obligations in clause 10.5 as they relate to us performing this assessment.
- 4.95 Subject to the Australian Consumer Law provisions in the General Terms of Our Customer Terms, you agree that the Storage Centralisation service merely facilitates the centralisation and consolidation of your data in a data centre and that you're responsible for (and we aren't liable for):
 - (a) managing your servers and storage arrays, whether at your branch sites, the data centres or otherwise;
 - (b) any aspects of managing your server, including cabling and configuration;
 - (c) your data storage and associated requirements;
 - (d) migration of your data from your branch sites to the data centre; and
 - (e) any data corruption or loss.
- 4.96 Subject to the Australian Consumer Law provisions in the General Terms of Our Customer Terms, if there's a fault or issue with your Storage Centralisation service and that is caused by, contributed to, or related to anything set out in clause 4.95, you agree that this is a cause beyond our reasonable control and clause 12.15 applies.
- 4.97 As part of your Storage Centralisation service, we can provide you with activity reporting under clause 12.37.
- 4.98 If you request an upgrade to the operating system on the devices used as part of the Storage Centralisation service, you may, at your own cost, need to upgrade or reinstall the hypervisor, in which case, clause 4.65(a) applies.

Managed Data Centre Switching

- 4.99 The MDCS service uses software defined networking switches, which aim to enable the following in your data centre network:
 - (a) automated provisioning;
 - (b) simplified management;
 - (c) enhanced visibility; and
 - (d) faster deployment of applications and network policies.
- 4.100 The MDCS service may include the following, depending on what you request:

Managed Data Networks Section

- (a) **controller / element manager** this is the "brain" of the service and centralises the management of your data centre network. You can request read-only access to the controller / element manager for up to 3 of your authorised users;
- (b) **spine switches** this is the heart or backbone of the service and connects to a series of underlying leaf switches performing a mesh network; and
- (c) **leaf switches** this acts as the data centre network access layer, connecting to external components such as compute, storage, firewalls and WAN services. It also connects to the backbone spine layer.
- 4.101 To apply for a MDCS service at a site, you must have a managed router with us at that site.
- 4.102 The MDCS service is only available with the Proactive Plus service tier.
- 4.103 You agree that the MDCS service merely facilitates the transfer of data in a data centre network. This means that at all times, you're responsible for (and we aren't liable for):
 - (a) your servers or storage arrays, whether connected to the switch fabric or not;
 - (b) your applications, whether in the data centre or in external environments, such as the cloud;
 - (c) power, cooling, rack space, physical cabling or any other aspects of the data centre environment;
 - (d) migrating your data connections and applications from any legacy infrastructure to the new data centre switch fabric; or
 - (e) any data storage, corruption or loss.
- 4.104 We'll make suggestions when we design and provision your MDCS service. These suggestions may include things like architecture, cabling, connectivity, and that your MDCS service or data centre be within 65 kilometres of our nearest service centre. If you don't follow our suggestions:
 - (a) we aren't liable for any faults or incidents with your MDCS service; and
 - (b) those faults or incidents are deemed to be outside our reasonable control, in which case clauses 12.15 and 12.16 apply to those faults or incidents.

Managed Infrastructure Software

- 4.105 Managed Infrastructure Software provides:
 - (a) Cisco Software Support Service; and

Managed Data Networks Section

- (b) Cisco Smart Net Total Care to help ensure coverage for Cisco base OS software and hardware.
- 4.106 Managed Infrastructure Software:
 - (a) is only available for MDN Custom;
 - (b) only provides routing and switching with no licensing portability support or access to on-going innovation; and
 - (c) provides only a Cisco Perpetual Licence. If other Cisco licences are required, you must obtain these separately.

5G Module service

- 4.107 The 5G Module service comprises a 5G module device which can be connected to compatible routers to provide SD-WAN and traditional routing via our mobile network. If you purchase the 5G Module service, the terms and conditions of that service including the applicable pricing will be set out in your separate agreement with us.
- 4.108 In order to purchase and use the 5G Module service, you must have and maintain for the duration of your 5G Module service:
 - (a) a compatible router (and we will notify you of compatible routers on request); and
 - (b) an eligible Adaptive Mobility data plan you acquire from us on separate terms and pricing, which are set out in the Adaptive Mobility section of Our Customer Terms and can be found here: https://www.telstra.com.au/customer-terms/digitalterms.
- 4.109 Coverage of our mobile network varies from location to location and we do not provide any warranties or guarantees about the availability or performance of our mobile network at your 5G Module service location(s).

5 Service term and termination

Minimum term

- 5.1 The minimum term is:
 - (a) 12 months for each component of your MDN service (other than SD-WAN);
 - (b) 24 months for an SD-WAN service; or
 - (c) any longer period set out in your separate agreement with us.
- 5.2 The minimum term:
 - (d) is separate for each device;

Managed Data Networks Section

- (e) starts on the date we first provide you with equipment services for the device; and
- (f) during which you rent an item of equipment from us, must be the same as the minimum term of your equipment services for that rental equipment.
- 5.3 For your MDN Bundle service, you must choose a 12, 24 or 36 month minimum term.
- 5.4 After the minimum term:
 - (a) your MDN service for the relevant device continues until terminated; and
 - (b) you or we may terminate your MDN service in respect of a device by giving at least 30 days' prior written notice. Termination of a MDN service for one device does not affect your MDN service for other devices (unless you have the MDN Bundle, in which case all components in that MDN Bundle will be terminated).
- 5.5 After the minimum term during which you rent an item of equipment from us, you may:
 - (a) continue to rent the equipment from us;
 - (b) return the equipment to us; or
 - (c) if we agree, buy the equipment (we will tell you the purchase price on request).

Termination

- 5.6 You must immediately tell us if a party (other than you or us) manages your data network or any devices on your network. If this occurs, we may immediately terminate your MDN service in whole or in part and, if you are still within your minimum term, you may have to pay us an early termination charge.
- 5.7 You can terminate a MDN service by giving us at least 30 days' prior written notice, but if you do so before the end of the applicable minimum term for that MDN service, you may have to pay us an early termination charge.
- 5.8 If you have:
 - (a) a MDN Custom service, you may terminate the MDN Custom service as a whole or terminate individual components or any additional services;
 - (b) a MDN Bundle service, all components of the MDN Bundle service must be terminated as a whole and may not be terminated in part; or
 - (c) additional services, you may terminate an additional service independently from your MDN Custom service or MDN Bundle service. But if you terminate a MDN Custom service or MDN Bundle service, any associated additional services must also be terminated.
- 5.9 Early termination charges are set out in your separate agreement with us.

Managed Data Networks Section

- 5.10 We can terminate any or all of your MDN services if you cause a defect or incident by accidental damage, or improper or negligent use of the equipment or the network. If we terminate a part of your MDN service (for example, the equipment service for a device), the other parts of your MDN service aren't affected unless:
 - (a) you have a MDN Bundle, in which case all components in the MDN Bundle are terminated; or
 - (b) we terminate the equipment rental, in which case all associated equipment services and additional services are terminated.
- 5.11 If you have a MDN Custom service, we may terminate your MDN service on a device in accordance with the General Terms of Our Customer Terms.
- 5.12 If you have a MDN Bundle service or rent equipment, we may cancel or suspend your service in accordance with the General Terms of Our Customer Terms.

Consequences of terminating a rental arrangement

- 5.13 If the rental arrangement for equipment is terminated for your MDN service (except for your MDCS service), then you must immediately, at your cost:
 - (a) return that equipment to an address we tell you and tell us in writing that you have done so (including by telling us the delivery address and date, the equipment's serial number, the courier company name, the consignment note number, and such other information we reasonably request); or
 - (b) where we specify it is possible, purchase the applicable equipment. We will tell you the purchase price on request.
- 5.14 If the rental arrangement for equipment is terminated for your MDCS service, then you must immediately at your cost, enable us to collect that equipment from where it's located. You must cooperate with us and ensure that we have prompt access to any site for this collection. If we can't promptly recover the equipment for any reason (e.g. no site access), you must promptly pay us the cost of that equipment and our attempted recovery costs, as we notify to you.
- 5.15 We continue to charge you for the equipment rental (and if applicable, the service tier or other charges) until you either return or purchase the rental equipment.

6 Equipment

How you can get equipment

- 6.1 We may provide equipment services on:
 - (a) your existing equipment if we (or our supplier) can support that equipment;
 - (b) equipment you rent from us; or

Managed Data Networks Section

- (c) equipment you buy from us.
- 6.2 We deliver the equipment that you rent or buy from us, to your nominated address.
- 6.3 You are responsible for the security of the equipment once delivered to your site. If the equipment is delivered to you before installation, you must make the equipment available for installation.
- Where possible, we use reasonable efforts to obtain the benefit of any warranties applicable to the equipment.
- 6.5 We aim (but don't guarantee) to deliver equipment to your premises within 30 business days of us accepting your application.

Licence to use related software

6.6 We procure the right for you to use any software that forms part of the equipment or the MDN service on the same terms that the relevant third party vendor grants such licences. You must comply with the licence terms.

Your equipment obligations

- 6.7 You must obtain our prior written consent before repairing or servicing the equipment or altering your access service.
- Regardless of whether you buy or rent equipment from us, you must not alter the labels or other identifying marks on any equipment we provide you.

7 Rental and purchase of equipment

Obtaining rental equipment

- 7.1 You don't have any title to any equipment you rent from us.
- 7.2 Your MDN Bundle service includes rental equipment. You can choose your rental equipment from a list we make available from time to time. Your MDN Bundle service only supports this rented equipment.
- 7.3 The rental charges for rental equipment are included as part of the monthly service tier charges for your MDN Bundle service.

Use of rental equipment

- 7.4 You must:
 - (a) ensure the rental equipment is kept in good order and repair;
 - (b) not sell, dispose of or encumber the rental equipment; and

Managed Data Networks Section

(c) allow us (or our supplier) to inspect the rental equipment at reasonable times.

Replacement, alterations and addition of parts

- 7.5 Additional charges may apply if you modify the rental equipment without our prior written consent and the modifications reduce the equipment's use, value or functionality. This charge is a genuine pre-estimate of our loss.
- 7.6 If you remove a part of the rental equipment, you must at your own cost, replace the removed part with a part of equal or better quality and functionality ("**Replacement Part**"). The Replacement Part forms part of the rental equipment.
- 7.7 You may remove any part of the rental equipment that you have added, provided that:
 - (a) it is not a Replacement Part (unless the Replacement Part is being replaced); and
 - (b) the addition and subsequent removal of the Replacement Part does not reduce the equipment's use, value or functionality.
- 7.8 If we supply additional parts or upgrades to the rental equipment, this is treated as an add, move or change (as described below) and your rental charges may increase as a consequence. We tell you of any increase in rental charges before supplying such additional parts or upgrading the rental equipment.

Lost, stolen or damaged equipment

7.9 If any part of the rental equipment is lost, stolen or damaged beyond economic repair (except where it was caused by our breach or negligence), you must promptly tell us and pay us the present value of the rental equipment. If this occurs before the expiry of the applicable rental term (or your chosen service term if you have the MDN Bundle service), early termination charges may apply.

Maintenance

7.10 If you service or maintain the rental equipment, you must do so in accordance with the relevant third party vendor specifications and our reasonable requirements.

Insurance

7.11 You must obtain and maintain adequate insurance for the value of the rental equipment and for your ability to pay all rental charges. You must show us this insurance policy on our reasonable request from time to time.

Purchase of equipment

7.12 If you purchase equipment from us, you own it when we receive the purchase price.

Managed Data Networks Section

8 Security of the equipment and network

Level of security provided

- 8.1 We take reasonable care to control electronic access by third parties to the equipment for which we provide a MDN service except where you chose the Basic Managed service tier. However, you are responsible for all equipment and network security.
- 8.2 Unless otherwise agreed in writing, we have exclusive access to the login and password for all equipment we manage.
- 8.3 You may provide us with specific written instructions regarding your equipment's security. We will implement those instructions if we think they are reasonable.
- 8.4 You must tell us in advance of any vulnerability scanning or security assessment of your network.

When we don't provide security

- 8.5 We don't provide the level of security referred to above if there are deficiencies in the equipment or software. To reduce your security risk, we may schedule installation of software patches provided by our suppliers. If you ask us to install software patches at any other time, we may charge you for the applicable software update.
- 8.6 We don't provide you with any security services as part of your MDN service other than as described in this clause.

9 Your network details

What you must do

9.1 You must give us complete network diagrams (including IP addresses and copies of configuration files) for networks that are already installed and you want us to manage or optimise. We can't manage or optimise all networks that are already installed and we will tell you if this is the case.

Network design

- 9.2 If you acquire the MDN service, we provide the network design and installation component of your MDN service based on the network design or business requirements that you give us ("**Design**"). We can make any reasonable changes to the Design but will tell you of these changes before installation of your MDN service.
- 9.3 After the network design process, we will give you a site schedule containing the details of your MDN service based on the Design. You must:
 - (a) review any site schedules immediately when you receive them; and

Managed Data Networks Section

(b) tell us within 7 business days of receiving any site schedule if you think that it does not accurately describe your MDN service, otherwise we are entitled to rely on your site schedule as an accurate description of your MDN service.

Intellectual Property and confidentiality

- 9.4 If we design your network, we own all Intellectual Property Rights connected with the design, including in the network diagrams, management IP addresses and equipment configurations ("Items").
- 9.5 We licence you to use the Items solely for the purpose of your MDN service. The licence ends upon expiry or termination of your relevant MDN service and we will give you access to your devices to manage the equipment configuration and your network.
- 9.6 The network diagrams and other information we give you with your MDN service is our confidential information. You must protect and keep this confidential.

10 Network implementation services

Site audit

- 10.1 If your service tier allows, you may apply for a site audit for an additional charge. The site audit determines if your site is ready for installation of your MDN service. We will notify you of the charge for the site audit at the time you apply for it.
- 10.2 If we don't perform a site audit beforehand, you must ensure your site and equipment are ready for installation. If your site and equipment aren't ready, there may be additional charges which we will tell you of at that time. You must, at your expense, comply with our reasonable directions to make your site and equipment ready.

Managed Wi-Fi Dedicated and Managed Wi-Fi Cloud site survey

- 10.3 You can apply for a site survey for your Managed Wi-Fi Dedicated, Managed Wi-Fi Cloud or Managed Wi-Fi Analytics service. The site survey aims to:
 - (a) ascertain the radio frequency coverage requirements of your site (ie. How many access points are needed for the network coverage at your site);
 - (b) determine points of wired connectivity for root access points (mesh network backhaul); and
 - (c) determine the physical and structural installation requirements for installing the service on your site.
- 10.4 You must obtain a site survey from us if any of the following applies:
 - (a) you need a security enhanced Managed Wi-Fi Dedicated service;
 - (b) you need a Managed Wi-Fi Analytics service; or

Managed Data Networks Section

- (c) for your Managed Wi-Fi Cloud service, you have 4 or more access points or you have non-standard or complex requirements (we can confirm this on request).
- 10.5 You must give us:
 - (d) reasonable access to your site at times we reasonably request;
 - (e) all reasonable plan, site and other information we request; and
 - (f) all necessary mechanical aids and tools for us to conduct the site survey;
- 10.6 We will give you a conceptual design report for the Managed Wi-Fi Dedicated, Managed Wi-Fi Cloud or Managed Wi-Fi Analytics service at your site.
- 10.7 If we don't perform a site survey before installing your Managed Wi-Fi Dedicated, Managed Wi-Fi Cloud or Managed Wi-Fi Analytics service, your service may not function properly (for example, access points may not be installed in optimum locations and radio frequency fields may be inefficient). If after installing your service, we have to attend your site for these or similar issues, there may be an additional charge. We'll tell you of any additional charges before starting work.

Equipment installation and configuration

- 10.8 You may request equipment installation services if your service tier allows. We will tell you if any additional charges apply at the time of your request.
- 10.9 We can't install the equipment if we can't promptly or properly access your site. If this happens, we aren't liable for any delays and there may be additional charges which we will tell you of at that time.
- 10.10 As part of your MDN service, we provide an appropriately configured redundant management connection to enable us to remotely manage devices and collect reporting information. You must obtain and maintain your access service separately. The charges and terms for your access service are separate from and in addition to the charges and terms for your MDN service.
- 10.11 You must not change the configuration of your MDN service (including any equipment) without our prior consent. You acknowledge that if we make such changes, then we may need to change the speed of the link. We seek your consent before making this link speed change. If you don't consent, we may not be able to meet the relevant service targets.

Equipment and service commissioning

- 10.12 At commissioning, we remotely download your equipment configuration file prepared by us and check the equipment interfaces will accept configuration changes.
- 10.13 If you choose the Basic Managed service tier, we test the equipment to check that it is accessible for remote monitoring.

Managed Data Networks Section

- 10.14 After we determine that the equipment can be remotely monitored, we will tell you that the equipment has been satisfactorily commissioned.
- 10.15 Upon installing a Managed Wi-Fi Dedicated service, we perform a passive survey to check the radio frequency footprint, and produce a report incorporating the wireless LAN network presence physically and logically (RF) including assets.

Asset management

10.16 Asset management provides you with a snapshot of assets deployed in the network that we manage for you. This is in the form of an online report or network diagram, and is limited to the device model, name and FNN.

11 Service tiers

- 11.1 We provide equipment services based on the service tier you choose for each device.
- 11.2 The service tiers are set out in the table below:

SERVICE FEATURES	SERVICE TIERS (for MDN Custom service)						BUNDLES (for MDN Bundle service)			
	Network Care Plus	Basic Managed	Reactive	Proactive	Proactive Secure	Proactive Plus	Reactive Bundle	Proactive Bundle		
Network Implementation										
Site Audit	×	×	0	0	0	0	0	0		
Equipment installation	×	×	√#	√#	√ #	√ #	√ √	√ ✓		
Commissioning	×	✓	✓	✓	√S	✓	√ √	√ ✓		
Accredited equipment purchase	✓	0	0	0	0	0	N/A	N/A		
Accredited equipment rental	✓	×	0	0	0	0	✓✓	✓✓		
	Network Management									
Single Service Desk	√ √	√ √	✓✓	√ √	√ √	*	√ √	✓✓		
Proactive fault monitoring and notification	×	√ √***	×	//	√ √	√ √	×	√ √		
Service Assurance	√√M	√√P	√√R	√√P	√√PS	√√P	√√R	√√P		
Equipment restoration	√√M	×	√√	√ √	√ ✓	√√	√ √	√√		
Transmission restoration	√√M	√√	/ /	√ √	√ √	√√	√ √	√√		
Activity report	√ √	√√	✓✓	√√	√ √	√√	√ √	√√		
Equipment operating system software mgt ^	×	×	✓✓	//	√√S	/ /	√ √	√ √		
Configuration file management	×	×	/ /	//	√√S	√ √	√ √	√ √		
Asset Lifecycle mgt. See Note 2	×	×	/ /	*	√√S	√ √	√ √	√ √		
			Equipmer	nt Maintenanc	e					
Equipment maintenance	√ √	×	0	0	0	0	√ √	√√		
Performance Reporting										
Online reporting	N/A	×	0	0	√ √	/ /	×	√ √		

The MDN section was last changed on 21 December 2023

SERVICE FEATURES	SERVICE TIERS (for MDN Custom service)						BUNDLES (for MDN Bundle service)		
	Network Care Plus	Basic Managed	Reactive	Proactive	Proactive Secure	Proactive Plus	Reactive Bundle	Proactive Bundle	
WAN Optimisation reporting – the level of reporting available is device dependent	N/A	×	√√	*	×	×	N/A	N/A	
Managed Wi-Fi Dedicated reporting	N/A	×	✓✓ Note1	✓✓ Note1	×	×	N/A	N/A	
MDCS performance reporting	N/A	×	×	×	×	√ √**			
Written analysis reporting	N/A	×	O**	O**	os	×	×	O**	
Online alarm view	N/A	×	×	0	×	×	×	√ √	
Response path reporting	N/A	×	0	0	×	×	×	√ √	
Application Visibility & Usage (AVU)	N/A	×	0	0	×	×	×	×	
Enhanced Network Performance (ENP)	N/A	×	0	0	×	×	×	×	
			Adds, mo	ves & change	es				
Minor network alterations – simple	×	×	√ √*	√ √*	√ √*	✓	√ √*	√ √ *	
Minor network alterations – complex	×	×	0	0	OS	✓	0	0	
Major network alterations	×	0	0	0	os	✓	0	0	
Consultancy and audit services	×	0	0	0	os	0	0	0	
Security features									
Hosted environment of reporting/management systems	N/A	Shared	Shared	Shared	ASIO T-4 compliant	Shared	Shared	Shared	
Shared/Dedicated management systems	N/A	Shared	Shared	Shared	Shared w/ DSD certified gateway	Shared	Shared	Shared	

The MDN section was last changed on 21 December 2023

SERVICE FEATURES	SERVICE TIERS (for MDN Custom service)						BUNDLES (for MDN Bundle service)	
	Network Care Plus	Basic Managed	Reactive	Proactive	Proactive Secure	Proactive Plus	Reactive Bundle	Proactive Bundle
Encrypted management links	N/A	×	×	×	√ √	×	×	×
Site-to-site encryption with key management	N/A	×	0	0	√ √	0	×	×
Protocols used to access CPE	N/A	telnet, SNMP	telnet, SNMP	telnet, SMNP	SSH, telnet, SNMPv3, SCP	telnet, SMNP, API	telnet, SMNP	telnet, SMNP
Personnel accreditation/clearance	N/A	N/A	N/A	N/A	DSD "Protected"	N/A	N/A	N/A
Prime Infrastructure	N/A	×	0	0	×	×	×	×
Wireless Intrusion Prevention	N/A	×	0	0	×	×	×	×
Secure Radius Authentication	N/A	×	0	0	×	×	×	×
CleanAir Spectrum Monitoring	N/A	×	0	0	×	×	×	×
Device Locator	N/A	×	0	0	×	×	×	×

The symbols used in the above table have the following meanings:

- ✓ a standard service feature that is charged separately.
- a standard service feature where the charge is included in the applicable service tier charge.
- **x** the service feature is not available.
- O an optional feature for an additional charge.
- M the scope of our obligations are limited to the description of the Network Care Plus service tier, as described further below.
- P proactive service assurance (see below for explanation).
- R reactive service assurance (see below for explanation).
- S this activity is provided by operational personnel and systems cleared to the DSD "Protected" level criteria.

- ^ equipment operating system software management means periodic updates to the equipment software as we determine, performed to keep the equipment operational and secure.
- * 1 change for up to 5 devices in any 24 hour period made via Feature Network Changes (FNC) are included in the service tier charge. Any further changes incur an additional fee.
- ** ad-hoc reports, charged at consultancy rates.
- *** we monitor your network regularly and tell you of faults causing an alarm. However, we don't investigate these faults.
- # installation is not compulsory if existing accredited equipment is in place, we can support it, and it's ready for the MDN service features to be applied.
- Note 1: Managed Wi-Fi Dedicated reports are emailed to you.
- Note 2: We'll tell you if the accredited equipment we manage on your behalf is approaching end-of-life from a vendor support perspective. We'll suggest an alternate device.

Managed Data Networks Section

Proactive Secure service tier

- 11.3 The Proactive Secure service tier is provided by Defense Signals Directorate ("**DSD**") certified personnel in a shared certified secure Network Operations Centre environment.
- 11.4 The equipment supported by the Proactive Secure service tier must be on the DSD Evaluated Products List (EPL) and be accredited equipment.
- 11.5 The Proactive Secure service tier focuses on your equipment's security. It isn't designed to protect your network from unwanted use. Denial of Service (DoS) protection is available separately from us.

Network Care Plus service tier

- 11.6 If you choose the Network Care Plus service tier for an accredited device that you buy or rent from us, you can ask us to replace that device if it's faulty.
- 11.7 If you rent the device as part of Network Care Plus, you must ensure that the rental term for that device is the same as the term for its Network Care Plus service tier.
- 11.8 We provide the following under Network Care Plus:
 - (a) replace accredited devices we deem to be faulty, but only if we have a replacement device in stock and you're in our coverage area, which we can confirm on request; and
 - (b) access to a service desk (as further described below), but only for troubleshooting to confirm if your accredited device is faulty.
- 11.9 To receive Network Care Plus, you must promptly affix to the accredited device, any identification or other sticker we provide to you in accordance with our instructions from time to time. You must not remove this sticker unless we agree.
- 11.10 If you contact us or the service desk as part of Network Care Plus, you must ensure that your suitably qualified personnel:
 - (a) have already completed a full fault analysis of the accredited device;
 - (b) are contactable and available at our request (including on-site) as part of our fault diagnosis and replacement of the accredited device;
 - (c) promptly provides on request, accurate and full details of the accredited device including: the Telstra device and carriage "Full National Number"; device identification, including sticker details; chassis and product serial number; product model and hardware configuration; hardware maintenance level; network configuration diagram; "show tech" output; log and trace files; and any other information we request from time to time; and

Managed Data Networks Section

- (d) give us or our representatives, full cooperation and assistance and safe and prompt access to your sites and devices so we can perform our obligations to you.
- 11.11 If we replace an accredited device under Network Care Plus, we remove and own the replaced device.
- 11.12 As part of Network Care Plus, we may offer you software or other downloads for your device. By downloading the relevant item, you agree to:
 - (a) be bound by the applicable terms for the download; and
 - (b) pay us the charges for the download, as set out in your separate agreement with us. These downloads aren't included as part of the simple equipment configuration file changes under clause 15.10 they're a payable extra charge.
- 11.13 You're responsible for anything that's not part of Network Care Plus. This includes:
 - (a) any issues or problems with your network and devices (other than replacement of a faulty device as part of Network Care Plus);
 - (b) management, monitoring, configuration and reporting of your network and devices; and
 - (c) loading or reloading of any configurations, licences, files, applications or software on your devices.
- 11.14 You must immediately tell us of any changes to the device's configuration or location. You agree that any such changes may change your Network Care Plus charges or service term. We can confirm these revised charges and service term on request.

Equipment type according to size

- 11.15 We classify the equipment type according to size (small, medium or large). This helps us understand the level of management and complexity needed for that equipment. We can tell you the classification for each equipment type on request.
- 11.16 The MDN service does not include the support for the VPN client software or user administration of users of the VPN Concentrator.
- 11.17 Firewalls and VPN concentrators are classed as routers in terms of equipment type.

12 Network management, equipment services, other services

Network management

12.1 Network management is providing service assurance to your network, as described below. The level to which we manage your network depends on your chosen service tier and may include installation of equipment and monitoring and reporting on your network.

Managed Data Networks Section

Service desk

- We provide a service desk as a single point of contact for faults with your network or the equipment we manage as part of your MDN service. The service desk can be used by up to 10 of your authorised fault reporting personnel. You can change these authorised personnel at any time by telling us in writing.
- 12.3 In accordance with your chosen service tier, our service desk will record, monitor and manage faults and give you reports on the progress of restoring normal service.
- Your authorised fault reporting personnel can report a fault to our service desk at any time. Diagnosis of faults only occurs during your chosen service assurance hours.

Service assurance

- 12.5 Your MDN service is available with two *types* and two *levels* of service assurance.
- 12.6 The two *types* of service assurance are:
 - (a) **Reactive management** available under the Reactive or Reactive Bundle service tier. With reactive management, we investigate incidents after you ask us to.
 - (b) **Proactive management** available under the Basic Managed, Proactive Bundle, Proactive, Proactive Plus or Proactive Secure service tier. With proactive management, we monitor your network and investigate faults causing alarms, except for the Basic Managed service tier, where we advise you of faults but don't investigate them (in which case response times, restoration times and status reports don't apply).
- 12.7 The two *levels* of service assurance are:
 - (a) **Standard Restoration** this is included as part of your MDN service; or
 - (b) **SLA Premium** if you are eligible, you can choose this option for an additional charge and it replaces the Standard Restoration service level. If you choose SLA Premium, the relevant sections of the Standard Restoration and SLA Premium section of Our Customer Terms, apply to your MDN service.
- 12.8 As part of service assurance, we originate a trouble ticket after we are aware of the fault.
- 12.9 For your WAN Optimisation service, the priority levels below only apply if we manage your routers. If so, those priority levels only relate to the WAN Optimisation service. We don't provide any priority level assurances for the performance of your applications.

Priority levels

12.10 As part of service assurance, we assign a priority level to your fault. Where applicable, we aim to meet the target time frames outlined in the table below:

For your MDN service (excluding your MDCS service):

Priority Level	Response time (in your fault restoration hours)	Restoration time (in your fault restoration hours)	Status reports (in your fault restoration hours)
Priority 1 – MDN service is down at a major site (or multiple sites) causing critical impact to business operations if the service is not restored quickly.	30 minutes	Restored (or work around) in 12 hours	Every hour
Priority 2 – MDN service is down at a minor site, or customer service is severely degraded impacting significant aspects of business operations.	30 minutes	Restored (or work around) in 12 hours	Every 3 hours
Priority 3 – MDN service is degraded and noticeably impaired, but most business operations continue.	30 minutes	Restored (or work around) in 24 hours	Every 8 hours
Priority 4 – You need information or assistance on your MDN service.	2 hours	Actioned / responded to in 72 hours	Every 24 hours

For your MDCS service:

Priority Level	Response time (in your fault restoration hours)	Restoration time (in your fault restoration hours)	Status reports (in your fault restoration hours)	
Priority 1 – MDCS service is down at the data centre causing critical impact to business operations if the service is	15 minutes	Restored (or work around) in 3 hours for metro zone	Every hour	
not restored quickly.		Restored (or work around) in 6 hours outside of metro zone		
Priority 2 – MDCS service is down at the data centre and the customer service is severely degraded	15 minutes	Restored (or work around) in 6 hours for metro zone	Every 3 hours	
impacting significant aspects of business operations.		Restored (or work around) in 12 hours outside of metro zone		
Priority 3 – MDCS service is degraded and noticeably impaired, but most business operations continue.	1 hour	Restored (or work around) in 24 hours	Every 8 hours	
Priority 4 – You need information or assistance on your MDCS service, or non-business impacting incidents.	2 hours	Actioned / responded to in 24 hours	Every 24 hours	

Note: We can confirm on request which zone you're in.

- 12.11 "Response time", "restoration time" and "status reports" in the above table are defined in the Standard Restoration and SLA Premium section of Our Customer Terms.
- 12.12 For the response time in the above table, we respond to you by telephone, email or sms.

The MDN section was last changed on 21 December 2023

Managed Data Networks Section

12.13 If we don't meet the Priority 1 or Priority 2 restoration times above, you may be eligible for a rebate. Further details are in the Standard Restoration and SLA Premium section of Our Customer Terms.

Fault monitoring and notification

- 12.14 We monitor and manage equipment and the data transmission services in your network.
- 12.15 The management of faults or incidents are not automatically included in your MDN service and service assurance does not apply to the extent those faults or incidents are caused or contributed to by:
 - (a) except to the extent caused or contributed to by our (or our contractors') negligence or breach of Our Customer Terms,
 - (i) incidents with your equipment (including equipment that you buy or rent from us) caused by you or a third party (including incidents caused by your failure or a third party's failure to maintain appropriate power, temperature or other environmental conditions in respect of the equipment);
 - (ii) the cutting of cable or fibre which is needed to provide your MDN service;
 - (iii) interference or damage to our equipment or network by you or by a third party;
 - (iv) incidents in relation to equipment we don't manage as part of your MDN service; or
 - (v) you not giving us sufficient and timely access to your premises and equipment so that we can carry out the repair or restoration; or
 - (b) any other cause beyond our reasonable control (including, but not only, acts of God, industrial disputes of any kind, lightening, fire, earthquake, storm, flood, government restriction, an Australian Competition and Consumer Commission determination, determination of any court of law or any such similar event).
- 12.16 Where we manage or correct a fault or incident caused or contributed to by any of the above, we may charge you at our then current rates for carrying out those services. We will advise you of those charges as soon as we are reasonably able to do so.

Fault restoration hours

- 12.17 For fault restoration with your MDN Custom service, you can choose from the following:
 - (a) **Extended Business Hours** this means between 7am to 9pm, Monday to Saturday, including public holidays at the relevant site in Australia; or

Managed Data Networks Section

- (b) **24x7** this means 24 hours a day, 7 days a week. 24x7 incurs an additional charge and your chosen vendor maintenance level must comply with the requirements below (under Equipment maintenance support).
- 12.18 For fault restoration with your MDN Bundle service, you receive 24x7 coverage.
- 12.19 We only respond during your chosen fault restoration hours.

Major network alterations

12.20 If your chosen service tier includes major network alterations, we upgrade your network at your request and for the applicable charges which we will tell you of at the time.

Configuration file management

- 12.21 Equipment configuration file management stores and holds device configurations. If the configuration files changes, we store the latest version and log it with the current version number, together with two previous versions. We take full control of the configuration file of a managed device in your network (except during commissioning).
- 12.22 We will restore the most recent configuration file that was stored to any device (that is part of your MDN service) that needs replacing.

Equipment maintenance support

- 12.23 You can arrange your own equipment maintenance (except in relation to your MDN Bundle service, which includes equipment maintenance) or receive it from us. However, for the Basic Managed service tier, you must arrange your own equipment maintenance.
- 12.24 If you or a third party provides equipment maintenance and an incident occurs in relation to your MDN service that requires that equipment maintenance to be performed, then:
 - (a) our service assurance, priority level, rebates and any other of our obligations that are connected with, or dependent on, you or the third party performing equipment maintenance, are automatically suspended until that equipment maintenance is fully and properly performed; and
 - (b) our obligations in the paragraph above do not resume until you tell us and we confirm that equipment maintenance has been fully and properly performed.
- 12.25 Where you ask us to provide equipment maintenance, our equipment maintenance service has selectable maintenance levels relating to the on-site response time and service hours. You must choose a maintenance level for each device we support.
- 12.26 The vendor maintenance levels you can choose as part of equipment maintenance (including target response and restoration times) are available from us on request. Your chosen vendor maintenance level must:
 - (a) be compatible with the restoration time under your service assurance level; and

- (b) have the same or better target restoration time than the restoration time under your chosen service assurance level.
- and we can tell you if your chosen maintenance level meets the above requirements.
- 12.27 If your chosen vendor maintenance level does not comply with the above requirements or you choose the Next Business Day ("**NBD**") response, you must have appropriate and sufficient on-site spares and standby equipment (at your expense). Otherwise, we may not be able to meet our service assurance or other obligations to you.
- 12.28 Some maintenance levels are not available if your site is a remote site. Where maintenance is provided for equipment at a remote site, there may be delays.
- 12.29 We will give you at least 30 days' notice if we can no longer provide the equipment maintenance for the model of equipment that you have and we will give you the opportunity to purchase equipment that we can support.
- 12.30 As part of maintenance support, we may provide you with a software version from time to time if we reasonably think it will help ensure the operability and security of your network. We will give you notice of this occurring. If you do not agree to us upgrading the software, we may not be able to meet our service assurance targets.

Emergency device replacement service

- 12.31 If we provide equipment maintenance support for certain accredited devices you bought or currently rent from us, or that we manage on your behalf, and the device is lost, stolen or damaged, you can request an emergency device replacement.
- 12.32 If we accept your request, we aim to install and commission an equivalent or reasonably similar device for you. We aim (but don't guarantee) to do this within the target restoration time applicable to the fault priority and equipment maintenance you purchased through us. This may take longer if we cannot safely or promptly access your site.
- 12.33 We charge you for the replacement device at the then current recommended retail price published by the accredited device manufacturer, less any applicable discount in your agreement with us. We tell you the price at the time you request a replacement device.

Online alarm view

- 12.34 The online alarm view service is not available for order from 1 August 2018. The online alarm view service is an optional-add on at additional charge. This is a web-based application giving you views of network faults. It is only available with the Proactive and Basic Managed service tiers. You can view information in near real time online via a supported web browser. We aim (but don't guarantee) to update alarms every 60 seconds.
- 12.35 When your network is commissioned, you can apply for the online alarm view service.
- 12.36 We filter the alarms to be displayed to you to remove irrelevant information.

Managed Data Networks Section

Monthly activity report

- 12.37 We give you a monthly activity report that details activity of your MDN service. The report contains the following:
 - (a) your closed trouble tickets, including reported time, restored time and fault cause;
 - (b) system closed alarms, including reported time, restored time and fault cause;
 - (c) closed planned interruptions;
 - (d) completed minor service changes and applicable charges; and
 - (e) completed request for information.

Consultancy and audit services

12.38 You request consultancy services (including baselining) and audits on your network for an additional charge. We will tell you of the applicable charges at the time of your request.

Network management system maintenance outages

- 12.39 Your MDN service may have scheduled maintenance outages which cause temporary loss of some or all of your service features. These outages usually occur after business hours. These outages may not necessarily affect your network's operation but may affect our ability to detect network issues during the outage.
- 12.40 You can ask our service desk to provide you with information on the outage duration and restoration time. Alternatively, notification of the current or next scheduled outage is available online at a website address we tell you from time to time.
- 12.41 We use reasonable care to provide the MDN service. However, subject to the Australian Consumer Law provisions in the General Terms of Our Customer Terms, unplanned outages may occur at any time (eg. due to a power outage at an exchange or for software deficiencies or security risks). We can't always give you notice of these unplanned outages.

13 Performance reporting

- 13.1 You can apply for certain reporting options under your chosen service tier. If we accept your application for performance reporting, this performance reporting section applies and we will provide your selected reports as described in this performance reporting section.
- Performance reporting aims to describe the performance of certain aspects of your MDN service and is charged in accordance with your separate agreement with us.

Online reporting

- When your MDN service is commissioned, you can apply for online reporting through us. An analysis and interpretation service is not provided with online reporting.
- 13.4 Online reporting aims to provide you with the following:
 - (a) **At a glance reports** performance statistics on individual elements of your network (eg. device, physical interface or permanent virtual circuit (PVC));
 - (b) **Trend reports** –performance statistics on the performance of a single element of your network, the relationship between different elements and tracking trends over time in groups of elements;
 - (c) **Health reports** regular scheduled reporting service on the performance of different elements of your network (such as local area network/wide area network, router, primary and backup access, remote access and response times);
 - (d) **Top N reports** –information on certain criteria that you nominate and our systems support eg wide area network links experiencing the highest error rate; and
 - (e) **WWAN reports** information on signal strength of your Telstra mobile network, bytes in and out of your Telstra mobile network and mobile network card temperature but this information is only available for certain compatible accredited devices. We can tell you if your device is compatible on request.
- 13.5 The type and level of online reporting available depends on the specific device you choose. For example, online reporting provides limited or no reporting on certain devices.
- 13.6 At a glance reports contain the following information:

At a glance report measure	Device (router)	Physical interfaces	PVC
Total bytes (bytes per second)	✓	×	×
Total packets (packets per second)	✓	×	×
CPU utilisation	✓	×	×
Total queue drops & discards in & out (packets per second)	✓	×	×
Total errors (errors per second)	✓	×	×
Latency (msec)	✓	✓	✓
Availability	✓	✓	✓
Free memory (bytes)	✓	×	×
Buffer create failures (failures per second)	✓	×	×
Packets in (packets per second)	✓	×	×
Packets out (packets per second)	✓	×	×
Buffer hits	✓	×	×

At a glance report measure	Device (router)	Physical interfaces	PVC
Buffer misses	✓	×	×
Bandwidth utilisation	×	✓	✓
Bandwidth utilisation total	×	✓	✓
Bytes (bytes per second)	×	✓	✓
Frames (frames per second)	×	✓	✓
Discards (frames per second)	×	✓	×
FECNs in (frames per second)	×	×	✓
BECNs in (frames per second)	×	×	✓
Discard eligible frames (frames per second)	×	×	✓

13.7 Health reports occur monthly and contain the following information:

Health Report	Content
Summary of router or switch physical interfaces	Indicates total network volume over the respective baseline period. Baseline period is a rolling period ending at the reporting day and starting at a fixed period before the reporting day.
Situations to watch table	Compares the performance of your network elements during the report period against the respective baseline period.
Top Ten/Leaders summary	Lists your network's 10 elements with the highest volume or usage, highest health index, and highest rate of change in volume and health index.
	For your local area network, wide area network and router elements, this section contains volume leaders charts, health index leaders table, volume change leaders table and health index change leaders table.
Element detail	Lists each of your network's elements and their associated volumes, baseline, bandwidth utilisation, CPU utilisation (router only) and average element health index for the reporting period. The elements are displayed in alphabetical order and each page can contain up to 25 elements.

Written analysis reporting

- 13.8 For the Reactive, Proactive, Proactive Secure or Proactive Bundle service tier, you can apply for written analysis reporting associated with your online reporting.
- You can request other reports at any time. If we accept your request, we will charge you for these reports at the consultancy charges in your separate agreement with us.
- 13.10 We determine the status of your network during analysis. We then classify your network into one of the groups below:

	Green	Blue	Orange
Network status ("health")	Performing within normal operational parameters. No material issues of concern identified.	Average performance within normal operational parameters. Minor issues of concern apparent.	Performance affected significantly. Issues identified where changes are recommended.
Report format	1-2 page summary showing performance statistics in a tabular form based on the top 20 elements by volume.	1-2 page summary. showing performance statistics in a tabular form based on the top 20 elements by volume	Written analysis and evaluation.
Executive summary	×	×	✓
Purpose	×	×	✓
Scope	×	×	✓
Router/switch	✓	✓	✓
Physical Interfaces	✓	✓	✓
Primary access	✓	✓	✓
Network issues	×	✓	✓
Recommendations	×	×	✓
Other Actions	N/A	We will liaise internally and consider issues for appropriate action or monitoring.	We recommend network changes or methods of coping with current network concerns.

Response path reporting

- 13.11 Response path reporting describes the response time or latency in your network from a source point to a destination point, for each communications protocol.
- 13.12 When your network is commissioned, you can apply for the response path reporting service through us.
- 13.13 Response path reporting may include the following features:
 - (a) network latency between a compliant router and any other network device;
 - (b) latency between a compliant router and any server or host;
 - (c) TCP connect time response;
 - (d) latency from a compatible router for specific protocols residing on servers; and

Managed Data Networks Section

(e) latency and jitter for traffic with differentiated service specified via a compatible router (this requires both the source and destination device to be compatible).

Application visibility and usage online reporting

- 13.14 Application visibility and usage online reporting is a chargeable optional extra, allowing you to access the following reports:
 - (a) **Service Application** this report shows the top 10 applications based on measured traffic. The report is presented either as Top Applications or Application Trending. Available statistics include Application name, Active detected protocols, Client Bytes, Client Packets, Server Bytes and Server Packets;
 - (b) **Application Clients** this report shows the top 10 clients based on measured traffic. The report is presented either as Top Clients or Client Trending. Available usage statistics include Client Host, Active detected protocols, Client Bytes, Client Packets, Server Bytes, Server Packets and Timestamp;
 - (c) Client Applications this report shows the top 10 applications for the selected IP host based on measured traffic. The report is presented either as Top Client Applications or Client Application Trending. Available statistics include Application name, Active detected protocols, Client Bytes, Client Packets, Server Bytes, Server Packets and Timestamp;
 - (d) **IP Pairs** this report shows the traffic for all the IP pairs. Available statistics include Agent, Source, Service, Client and Server information.
- 13.15 You can apply for Application visibility and usage online reporting through us.
- 13.16 Application visibility and usage online reporting does not include an analysis and interpretation service, which is an option at additional charge.

Enhanced network performance reporting

- 13.17 Enhanced network performance reporting describes the response time or latency in your network from a source point to a destination point, for each communications protocol.
- 13.18 You can apply for enhanced network performance reporting at the time your network is commissioned. Alternatively, you can apply for enhanced network performance reporting after your network has been commissioned via the service desk.
- 13.19 The enhanced network performance reporting includes the following reports:
 - (a) network latency, IP packet loss, and jitter variation between compliant routers (the source and destination devices must be compatible devices); and
 - (b) MOS (Mean Opinion Score) for Voice over IP traffic between compliant routers (this requires both the source and destination devices to be compatible devices).

Managed Data Networks Section

MDCS performance reporting

- 13.20 As part of your MDCS service, you can request access to standard online reporting and monthly reporting via email. You can request that these be customised and this will incur an additional fee, which we can confirm on request.
- 13.21 Standard online reporting (via a portal) aims to provide you with information on the performance of your data centre network, health score, topology view, leaf and spine switch status, controller/ element manager status, interface performance and relationships within the devices in the network fabric. You can request access to the portal for up to 3 of your authorised users.
- 13.22 The monthly email reports may include a summarised view of monthly activities on data centre network usage, component count, leaf and spine switch status, fan and power supply status, new software availability and features, as well as recommendations to improve your MDCS service.

14 Adds, moves and changes

14.1 You can request adds, moves and changes to your network depending on your chosen service tier. These adds, moves and changes are detailed below.

Minor Network Alterations - Simple changes

- 14.2 Simple equipment configuration file changes are as follows:
 - (a) **Access List changes** you can deny or permit certain IP address range/s or applications on a router or switch device;
 - (b) **Device Interface changes** you can change the interface on a router. This interface provides network connectivity to the router;
 - (c) **Device Management Access changes** you can change the network protocol for collecting IP traffic information from specified network devices;
 - (d) **Dynamic Host Configuration Protocol (DHCP) changes** you can change the automation of the assignment of IP addresses, subnet masks, default gateway, and other IP parameters;
 - (e) **IP Routing** static routing changes –you can change the static IP routing. Static routes can be added, deleted or modified or redistributed into the IPWAN VPN;
 - (f) **Firewall Policy changes** you can request to add or delete firewall rules;
 - (g) **IP Routing dynamic routing changes** you can request dynamic IP routing changes. Dynamic routing protocols can have networks added or deleted from them;

Managed Data Networks Section

- (h) **Network Address Translation (NAT) changes** you can modify the IP addresses and port numbers of IP packets for security or IP address conflicts;
- (i) for your WAN Optimisation service, you can request resets to user logins for the central policy manager;
- (j) for your WAN Optimisation service you can also ask us to do the following:
 - (i) turn on/off Compression (or any acceleration feature) for specific applications;
 - (ii) create or modify File Preposition; and
 - (iii) for threshold reporting you can modify reporting period and percentage metrics, but this is only available for certain accredited equipment; and
- (k) for a Managed Wi-Fi Dedicated service you can ask us to do the following:
 - (i) add, modify or delete a local user name and password; or
 - (ii) add, modify or delete a customer RADIUS server's IP address and key settings you can also ask us to do this for your Managed Wi-Fi Cloud service; and
- (l) for your MDCS service, we can confirm the relevant changes and price them on request.

Minor Network Alterations - Complex changes

- 14.3 Complex equipment configuration file changes are as follows:
 - (a) **Traffic Queuing and Marking Changes** you can apply Quality of Service (QoS) priority levels and application bandwidth shaping. Queuing and marking must already be predefined on your service. Modification is only permitted;
 - (b) **Traffic Tunnel Changes** Tunnelling is used to encapsulate traffic within a virtual tunnel. A tunnel may also have encryption applied for security purposes. Client initiated tunnels on workstations may request user names and passwords to be created, modified and deleted:
 - (c) **WWAN back up test** you can ask us to test your WWAN service, but only if you use WWAN as a service back up; and
 - (d) **MDCS service** we can confirm the relevant changes and price them on request.

Minor Network Alterations - Simple or complex change requests

14.4 If your chosen service tier allows, you can request a Minor Network Alteration (simple or complex changes) via:

Managed Data Networks Section

- (a) our Feature and Network Changes ("FNC") function which is available on the Order Online website located at a URL we tell you from time to time; or
- (b) the service desk, who use FNC on your behalf.
- 14.5 We endeavour to process your request:
 - (a) in relation to your MDN service (except for your MDCS service) within 24 hours of receiving your request via FNC and 48 hours of receiving your request via the service desk for simple equipment configuration file changes through FNC;
 - (b) in relation to your MDN service (except for your MDCS service) within 72 hours of receiving your request via FNC and 96 hours of receiving your request via the service desk for complex equipment configuration file change changes through FNC;
 - (c) in relation to your MDCS service, for your requests received via FNC during business hours:
 - (i) within 6 hours of receiving that request for, in our view, minor network alterations simple; and
 - (ii) within 24 hours of receiving that request for, in our view, minor network alterations complex.

Please note that we can only start processing your request after you've correctly completed the request form (if applicable) and given us all the information we reasonably need to process your request.

- 14.6 We endeavour to process your request during business hours. We endeavour to notify you if your FNC request takes longer to process than the target timeframes specified above.
- 14.7 You can use FNC to update us of your contact details. There is no charge for this.
- 14.8 Simple and complex equipment configuration file changes are charged in accordance with your separate agreement with us.
- 14.9 All simple and complex equipment configuration file changes and their associated charges (if applicable) will appear on the monthly activity report for your MDN service.
- 14.10 For simple or complex equipment configuration file changes through our service desk, we may provide you with other adds, moves or changes to your MDN service upon your request and for an additional charge.

Major network alterations

14.11 You can request in writing to carry out major network alterations. After we receive your request, we will discuss with you the specifications and any charges that apply.

Managed Data Networks Section

- 14.12 Major network alterations are any alterations to your MDN service or network that are not minor network alterations. Major network alterations include:
 - (a) adding a new device or site to your MDN service;
 - (b) replacing or relocating your equipment;
 - (c) altering your service tiers;
 - (d) altering equipment rental arrangements; and
 - (e) cancelling some, or all of your MDN services.
- 14.13 Once we have agreed the alterations with you, we will give you an updated site schedule. You must:
 - (a) review any site schedules immediately when you receive them; and
 - (b) tell us within 7 business days of receiving any site schedule if you think that it does not accurately describe your updated MDN service, otherwise we are entitled to rely on your site schedule as an accurate description of your MDN service.

15 Charges for your MDN service

15.1 The charges for your MDN service are set out in your separate agreement with us or are priced on application where the relevant charge is not in that separate agreement.

Equipment charges

- 15.2 If you purchase equipment, we will tell you what the equipment purchase charges are. The charges depend on our equipment supplier and may change from time to time.
- 15.3 If we incur delivery or other charges (including taxes or levies) for equipment ordered for you from our suppliers, we may pass those charges to you. We will tell you what those charges are.
- 15.4 If you rent equipment from us, we tell you what the equipment rental charges are. You must continue paying us these charges even if certain events occur, including a defect, breakdown, accident, loss, theft, damage, non-return of equipment (see above), or any unavailability of the equipment, unless our breach of contract or negligence caused the event or unavailability.

Managed Wi-Fi Dedicated, Managed Wi-Fi Cloud and Managed Wi-Fi Analytics charges

15.5 The Managed Wi-Fi Dedicated, Managed Wi-Fi Cloud and Managed Wi-Fi Analytics service installation charges don't include materials such as cabling, patch leads, 12RU racks, patch panels, network devices, mechanical aids and tools, or any other work required to your site in order to acquire the service (eg. building approvals).

Managed Data Networks Section

15.6 Changes to accommodate additional throughput are charged extra and priced on application.

Service tier charges

We charge you for the service tier that you choose. The charges for the service tiers are based on service hours and your equipment type.

Equipment maintenance support charges

15.8 If we provide equipment maintenance support to you as part of the MDN service, the charge is included as part of your MDN service, unless we tell you otherwise.

Adds, moves or changes charges

Minor network alterations - equipment configuration file changes

- 15.9 Equipment configuration file changes are charged as per your separate agreement with us.
- 15.10 If you request a simple equipment configuration file change through FNC, there is no charge for up to 5 devices in any 24 hour period, except for your MDCS service. For any additional requests beyond this, there may be an additional charge. For your MDCS service, we charge you per request, rather than per device.
- 15.11 If you request more than one equipment configuration file change in a 24 hour period, and that request is for the same change to different devices, we may group these requests and charge you accordingly.
- 15.12 Equipment configuration file changes outside of business hours incur an additional charge, as set out in your separate agreement with us.

Major network alterations

- 15.13 Major network alterations are charged as per your separate agreement with us.
- 15.14 Major network alterations outside of business hours incur an additional charge.

Consultancy and audit service charges

- 15.15 Consultancy (including baselining) or audit services are charged in accordance with your separate agreement with us.
- 15.16 The minimum charge for any consultancy and audit service is one hour.
- 15.17 If you chose the Reactive Bundle service tier, consultancy charges apply for customer requested changes and complex fault resolutions.

MDN Bundle charges

15.18 This MDN Bundle charges section applies if you have the MDN Bundle.

The MDN section was last changed on 21 December 2023

- 15.19 The applicable service tier charge includes installation of your chosen rental equipment during business hours.
- 15.20 You must continue paying us the applicable service tier charge even if certain events affect your rental equipment, including a defect, breakdown, accident, loss, theft, damage, non-return of equipment (see above) or any unavailability of the equipment, unless our breach of contract or negligence caused the event or unavailability.
- 15.21 Any adds, moves or changes to your network or network design (such as hardware upgrade or installation of additional features) may incur additional charges.

Site survey charges

15.22 Any site surveys we perform in connection with your MDN service are charged in accordance with your separate agreement with us.

Travel and accommodation charges

15.23 We charge you for travel and accommodation costs we incur in providing your MDN service. We will seek your consent before incurring these costs. You must not unreasonably withhold this consent.

16 Special meanings

The following words have the following special meanings:

accredited device or accredited equipment is a device or equipment which we approve from time to time for management at the applicable MDN service tier. We may have arrangements with our suppliers for the purchase and maintenance support of such equipment.

accredited feature means a feature or functionality that we support from time to time.

alarm means a system generated notification of a fault.

business hours are 8am to 5pm Monday to Friday (excluding local public holidays) in the time zone of your site in Australia where the equipment is located.

equipment consists of the routers, switches, appliances and other accredited equipment that receives equipment services as part of the MDN service. Also referred to as a **device**.

equipment maintenance means the replacement of faulty equipment with on-site attendance and access to vendor provided software on demand.

equipment services means the network management, equipment maintenance and performance reporting services component of your MDN service that are provided for the equipment in accordance with the service tier you chose for that equipment.

Managed Data Networks Section

fault means any event that:

- (a) is not part of the standard or expected operation of your network; and
- (b) causes a significant interruption to, or a significant reduction in, the quality of the service in your network, as measured by our systems.

installation means physically connecting the equipment at your premises. It may involve set-up in the rack or similar location, powering up the device, loading the device configuration and connecting to our network.

intellectual property rights means:

- (a) copyright, author's rights and any related or neighbouring rights (including any copyright or other exclusive right in or to any compilation or database);
- (b) all rights conferred under statute, common law or equity in relation to inventions (including patents), registered and unregistered trademarks, registered and unregistered designs, circuit layouts and confidential information;
- (c) all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields; and
- (d) any similar or corresponding rights to the foregoing wherever subsisting in the world; and
- (e) includes applications for and the right to make applications for the grant of any of the foregoing.

location is a continuous area served by one or more items of wireless equipment (whether or not all of those items serve all parts of that area).

network is described in our agreement with you, is shown on your network diagram and is made up of two or more sites interconnected using our data transmission services.

site means your premises where the equipment is located.

software is the computer programmes relating to the operation of the equipment (including firmware and application software supplied by us).

trouble ticket is issued by our service desk in response to a fault and:

- (a) states the time a fault is reported to the service desk;
- (b) states the nature and location of the fault, where you or we identify this information;
- (c) tracks our activity in restoring your service;
- (d) states who contacted the service desk; and
- (e) has an identifying sequence number.